

REMARKS

The application has been amended as needed so as to place it in condition for disposal at the time of the next Official Action.

In the course of this revision, subject headings have been inserted at the appropriate locations throughout the specification in a manner consistent with the preferred guidelines set forth at 37 CFR §1.77 and Section 601 of the Manual of Patent Examining Procedure (MPEP).

The Official Action had objected to the drawings, as they contained several informalities which were highlighted in the Notice of Draftsperson's Patent Drawing Review. Accompanying this amendment are replacement sheets, which are believed to address all of the informalities helpfully pointed out by the draftsperson.

The Official Action had objected to claims 11, 16 and 17 for using terminology such as "transversally" rather than --transversely--, and "and/or".

With the present amendment, it will be seen that these claims have been canceled, and that the newly drafted claims avoid the use of such objected terminology.

Claims 5, 9, and 10-16 were rejected under 35 USC §112, second paragraph, for indefiniteness. The Primary Examiner's well-taken formal criticisms of these claims were borne in mind

as points to be corrected when drafting the new claims. Specifically, new claims 22-45 were drafted in such a manner as to particularly point out and distinctly claim the subject matter regarded by applicant as his invention. When drafting the new claims, great care was taken to ensure that the terms recited therein possessed proper antecedent basis. Moreover, the use of vague, indefinite, or otherwise objectionable expressions was avoided. Thus, new claims 22-45 are believed to set out and circumscribe a particular device for treating soil by aeration, with a reasonable degree of precision and particularity, when read in light of the teachings of the original specification. It is respectfully submitted that a person having ordinary skill in the art would be reasonably apprised of the metes and bounds of new claims 22-45. Accordingly, it is believed that the rejection of the claims under 35 USC §112, second paragraph, has been overcome and should not be applied to any of new claims 22-45.

Claims 1-2, 6, 7, 10 and 17-18 were rejected under 35 USC §103(a) as being unpatentable over HAMAWAKI et al. 5,178,221 in view of FULTON 2,127,510.

The Official Action states that the HAMAWAKI et al. reference discloses a device and a method of using the device for aerating soil in much the same manner as recited in applicant's claims. The primary reference allegedly fails to teach a flexible carpet having openings for the drills which cut out the

soil plugs. The secondary reference to FULTON is relied upon as teaching such a carpet having through openings for the drills to pass through. It is concluded that it would have been obvious to one of ordinary skill in the art having the teachings of these references beforehand to have modified HAMAWAKI et al. so as to include a receiving member comprising a collecting carpet with through holes for the tools as taught by FULTON in order to obtain a device for collecting the plugs from its aeration step without spilling the soil.

Reconsideration of the above rejection is respectfully requested for the following reasons.

Although both of the relied upon references relate to soil treatment machines which remove cores from the area of treatment, the respective machines work in significantly different manners.

Specifically, the primary reference to HAMAWAKI et al. teaches the use, in an attached device separated from the tools device, of a moving conveyor belt not resting on the soil for conveying cores which are projected from the tools to the rear on the conveyor belt.

This conveyor belt, which is part of a separate rear device from the tools device, does not rest on the soil as is plainly seen from Figure 7 of the patent, where the conveyor belt 38 is not depicted as touching the soil. A ground-contact 51

rests on the soil, but it is clearly separate from the conveyor belt.

In addition, it should be pointed out that in HAMAWAKI et al. the belt is moving in order to convey/carry out the cores, and consequently it would not be possible to have such belt resting in a static manner on the soil, while at the same time have it move to convey/carry the core. This would represent a physical contradiction. Furthermore, to provide through openings through the conveyor for allowing the tools to pass through would destroy the intended use of the conveyor, since the openings would have to have a length equal to the entire circumference of the belt, otherwise the moving conveyor belt would be punched by the tools during its movement. With such hypothetical configuration, the cores could spoil the soil by falling through these endless openings, which would destroy if not frustrate the intended use of the conveyor belt in HAMAWAKI et al.

The secondary reference to FULTON teaches the use, in an integral apparatus having tools and a base plate, of a conveyor to remove the cores, the core falling in place.

In FULTON, the dirt excavated by the drills falls *in situ* upon a plate 107 and an endless sprocket chain 110 with paddles or scrapers 111 is used to remove transversely the dirt from the base plate 107 (see Fig. 8 and page 3, column 2, lines 48-71). Thus, the apparatus has a base plate 107, which appears

to be rigid from the specification, and is turned upwardly at its ends, because the plate which rests on the soil should not dig into the earth, and a flexible plate could hardly dig into the earth. The tools pass through openings in the plate 107 which are of the size of the tools. This confirms that the plate resting on the soil should be rigid in order to have a fit during the work of the apparatus (tubes/collars are provided on the plate for the shank of the drill 44, and they should be correctly aligned, which would be impossible with a flexible carpet). Moreover, in FULTON, at the rear of the tools 44 and after their drilling action for making holes, there are additional devices for the distribution of fertilizer or other substances.

Consequently, there is simply no basis to characterize the rigid plate 107 of FULTON as a flexible carpet, as used in the present invention.

In summary, the HAMAWAKI et al. reference discloses a moving conveyor belt not resting on the soil and at a distance from the tools, whereas FULTON discloses a rigid base plate having openings for the tools and integral means for conveying out the cores.

It is respectfully submitted that even if one of ordinary skill in the art could have somehow contemplated the combination of two such different teachings, the direct combination would not result in a useful device. Indeed, FULTON

is a boxed apparatus in which the cores are not ejected at the rear (additional device for fertilizer at the rear), and the attachment of the HAMAWAKI et al. conveyor belt device at the rear of FULTON apparatus would be useless.

In addition, if only specific means from these respective references are selected and modified, this would result in a selection which is neither disclosed nor suggested by the references, and would depart from the fair teachings of these references which would lead a person skilled in the art to convey out the cores, in sharp contrast to the present invention, where the cores are kept in place. Moreover, the structural differences between these references, that is, an integral apparatus vs. separated device; a rigid base plate vs. a moving conveyor belt; cores falling in place vs. cores being ejected at the rear; base plate on the soil vs. belt not resting on the soil, are so significant, that without any reason, motivation or suggestion would lead to multiple possibilities which are, for the workable ones, still different from the herein claimed invention. Indeed, in all cases, the HAMAWAKI et al. belt is moving above the soil and convey out the cores.

It has been not well settled that "obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under §103, teachings of references

can be combined only if there is some suggestion or incentive to do so." See *ACS Hospital Systems, Inc. v. Montefiore Hospital et al.*, 221 USPQ 929 (Fed. Cir., 1984). Similarly, to support a conclusion of *prima facie* obviousness, either the references must expressly or impliedly suggest a claimed combination, or the Examiner must present a convincing line of reasoning as to why a person of ordinary skill in the art would have found the claimed invention obvious in light of the teachings of the references. See *Ex parte Clapp*, 227 USPQ 972 (US PTO Board of Appeals, 1985).

Thus, "one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." See *In re Fine*, 5 USPQ2d 1596 (Fed. Cir., 1988).

In the instant case, there is simply no reason, motivation or suggestion to utilize the flexible carpet having through openings for the tools, and resting on the soil in HAMAWAKI et al. taken in combination with FULTON, as advanced in the Official Action. It is only with knowledge gleaned from applicant's disclosure that the above prior art was mosaically combined to recreate a facsimile of the herein claimed invention. It is respectfully submitted that the above combination is improper as being predicated on impermissible hindsight. Moreover, as was pointed out above, such a combination would destroy the intended use of the conveyor belt in HAMAWAKI et al.,

as the cores would immediately fall back through the endless through openings of such conveyor belt.

The Primary Examiner had kindly indicated that claims 3, 4, 8, and 19-20 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form so as to include all of the limitations of the base claim and any intervening claims. In addition, the Primary Examiner's indication of allowability with respect to claims 5, 9 and 11-16 is sincerely appreciated. However, in view of the present amendment and the foregoing remarks, therefore, it is believed that this application has been placed in condition for allowance. Reconsideration and allowance on the basis of new claims 22-45 are accordingly earnestly solicited.

In the event that there are any questions relating to this amendment or to the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that the prosecution of this application may be expedited.

Please charge the fee of \$27 for the three extra dependent claims added herewith to Deposit Account No. 25-0120.



The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted,

YOUNG & THOMPSON

*Benoit Castel*

---

Benoit Castel, Reg. No. 35,041  
745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

BC/lrs